ASYMMETRIC WIRELESS PROTOCOL COMMUNICATIONS

ABSTRACT OF THE DISCLOSURE

In a wireless network, data transmitted from a one station to another station is transmitted using the 802.11b protocol while data transmitted in the other direction is transmitted using an OFDM modulation of the 802.11g protocol. Data and acknowledgements might be transmitted using the same modulation, the same data rate or distinct data rates and/or distinct modulations. Communication between a first station and a second station might comprise: at the first station, transmitting data packets to the second station using a first data modulation and a first data rate; at the first station, transmitting acknowledgement packets to the second station in response to data packets received from the second station, using a first acknowledgement modulation and a first acknowledgement rate; and at the second station, transmitting data packets to the first station using a second data modulation and a second data rate; at the second station, transmitting acknowledgement packets to the first station in response to the data packets received from the first station, using a second acknowledgement modulation and a second acknowledgement rate, wherein the first data rate is distinct from at least one of the second data rate, the first acknowledgement rate, or the second acknowledgement rate.